

**CALIFORNIA DEPARTMENT OF WATER RESOURCES** 

# **NEWS FOR IMMEDIATE RELEASE**

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Contact:

Nancy Vogel, Public Affairs Director – (916) 651-7512 Nancy.Vogel@water.ca.gov

Ted Thomas, Information Officer – (916) 653-9712 Ted.Thomas@water.ca.gov

## Drought Triggers Need for Installation of Emergency Salinity Barrier on Delta Channel

Temporary Barrier Would Deter Saltwater and Protect Delta Water Quality

**SACRAMENTO** -- Faced with potentially insufficient water supplies to repel salinity in the Sacramento-San Joaquin Delta, the California Department of Water Resources (DWR), in consultation with federal and state water and wildlife agencies, is moving to install an emergency, temporary rock barrier across a Sacramento-San Joaquin Delta channel.

DWR seeks to install a single emergency salinity barrier across West False River in May, to be removed six months later in November. State and federal water and wildlife officials, working as a Real-Time Drought Operations Management Team, have determined that the barrier would help deter the tidal push of saltwater from San Francisco Bay into the central Delta. The barrier would be essentially a pile of basketball-size rocks across the 750-foot-wide channel that still allows limited water flow upstream and downstream, depending upon tides. DWR, operator of the State Water Project, is seeking multiple permits from various agencies to accelerate installation.

Keeping saltwater from the central Delta is a priority, as a large portion of the state's freshwater supplies travel through this part of the Delta. The barrier would help prevent saltwater contamination of water supplies used by people who live in the Delta; Contra Costa, Alameda, and Santa Clara counties; and the 25 million people who rely on the Delta-based federal and state water projects for at least some of their supplies.

Typically when saltwater threatens to encroach deeper into the Delta, water project operators try to repel it either by slowing the pumping of water from the Delta or increasing the amount of water flowing into the Delta from upstream reservoirs.

In this fourth year of drought, Delta pumping by the state and federal water projects is already negligible. It takes three to five days for fresh water released from Lake Oroville or Shasta Lake to reach the Delta. An

emergency barrier would provide an additional tool to help limit salinity intrusion prior to arrival of fresh water from upstream reservoirs.

"We had hoped not to have to install any temporary emergency barriers in the Delta this year," said California Department of Water Resources Director Mark Cowin. "But conditions stayed dry through March and April. The West False River emergency barrier would provide a buffer that otherwise would have come from reduced Delta pumping. This summer, there is no Delta pumping to reduce. The barrier would help afford us time to move water from Oroville and Shasta should we need to push back saltwater intruding into the Delta."

The emergency barrier also would help mitigate a worst-case circumstance this summer in which upstream reservoirs lack sufficient water to meet the minimum outflow requirements to limit Delta salinity intrusion.

Emergency barrier removal would finish no later than November 1 to avoid flood season and potential harm to migratory fish. Removal is expected to take 45 days to 60 days.

#### **Multiple Permits Needed**

For the past year, DWR has worked closely on the issue of emergency salinity barriers with multiple agencies, including the U.S. Bureau of Reclamation, operator of the Central Valley Project. DWR must obtain permits and a Temporary Urgency Change Permit renewal from the State Water Resources Control Board, a permit for levee modification from the U.S. Army Corps of Engineers, and a California Endangered Species Act permit from the California Department of Fish and Wildlife. In addition, DWR must consult with the U.S. Fish and Wildlife Service and National Marine Fisheries Service on protections for Delta smelt, Chinook salmon and other listed species. All of these agencies have worked cooperatively on the Real-Time Drought Operations Management Team for the past year.

The permit application process is underway, and DWR hopes to begin installation of the emergency barrier on May 8.

It would be erected across West False River about 0.4 miles east of its confluence with the San Joaquin River, between Jersey and Bradford Islands in Contra Costa County. The location is about 4.8 miles northeast of Oakley.

Construction, monitoring, mitigation and removal are estimated to cost roughly \$28 million, to be paid for with a mix of funding from Proposition 50, a \$3.4 billion water bond approved by voters in November 2002, and general fund dollars.

The trapezoid-shaped barrier, about 12 feet wide at the top, will temporarily block boat passage on West False River and be marked by warning signs, lights, and buoys. Alternative routes between the San Joaquin River and interior Delta, including Bethel Island marinas, are available (see attached map). The West False River site raises fewer concerns for threatened and endangered fish than other potential barrier sites considered by DWR.

#### Earlier Consideration of Emergency Barriers

Last year DWR studied the potential impacts of potential temporary barriers at three locations: Steamboat Slough, Sutter Slough, and West False River. The analysis found anticipated impacts could be mitigated to a less-than-significant level. DWR received and reviewed considerable public comments on the Initial Study and Proposed Mitigated Negative Declaration, available at

http://www.water.ca.gov/waterconditions/docs/Emergency\_Drought\_Barriers\_Initial\_Study\_and\_Proposed\_ Mitigated\_Negative\_Declaration.pdf.

At this time, DWR is not pursuing installation of temporary emergency barriers at Sutter Slough or Steamboat Slough. Although DWR is seeking permits from various agencies, the April 1 Executive Order by Governor Brown helps expedite installation of the West False River barrier in time to address emergency drought conditions. The Governor's Executive Order declared existence of conditions of extreme peril to public safety and directed DWR to implement emergency drought barriers if necessary.

The Executive Order suspends some California Environmental Quality Act requirements for certain drought relief actions, including installation of emergency drought barriers.

DWR last used emergency drought barriers to reduce salinity intrusion in 1976-77. DWR considered the installation of emergency drought barriers in 2014 but determined in late May of last year that they would not be needed, in part because February and March storms improved water supply conditions. Planning for future emergency drought barriers continued after last year's decision, with a focus on West False River, Steamboat Slough, and Sutter Slough. Earlier this year, based on the input of Delta residents, the Department also considered the feasibility and effectiveness of barriers on Miner Slough in the western Delta and on Steamboat Slough downstream of its confluence with Sutter Slough.

Emergency drought barriers on Miner Slough and Steamboat Sloughs were eliminated from consideration because of U.S. Fish and Wildlife Service concerns about potential effects on threatened Delta smelt.

#### Current Drought Emergency

The three-year period from 2012 through 2014 was the driest three-year period on record in California, and 2015 opened with the driest January in the state's weather record history. The Sierra Nevada snowpack typically peaks by April 1; this year, the snowpack was measured at five percent of historic average, the lowest measurement in recorded history.

Governor Brown declared a drought State of Emergency on January 17, 2014 and directed state officials to take all necessary actions to prepare for water shortages. The State Water Resources Control Board on March 17, 2015 announced new restrictions on water use, including limiting outdoor watering to two days per week and prohibiting lawn watering during rainfall and during the next two days. Earlier this month, the governor directed the State Water Resources Control Board to implement mandatory water reductions in cities and towns across California to reduce water usage by 25 percent.

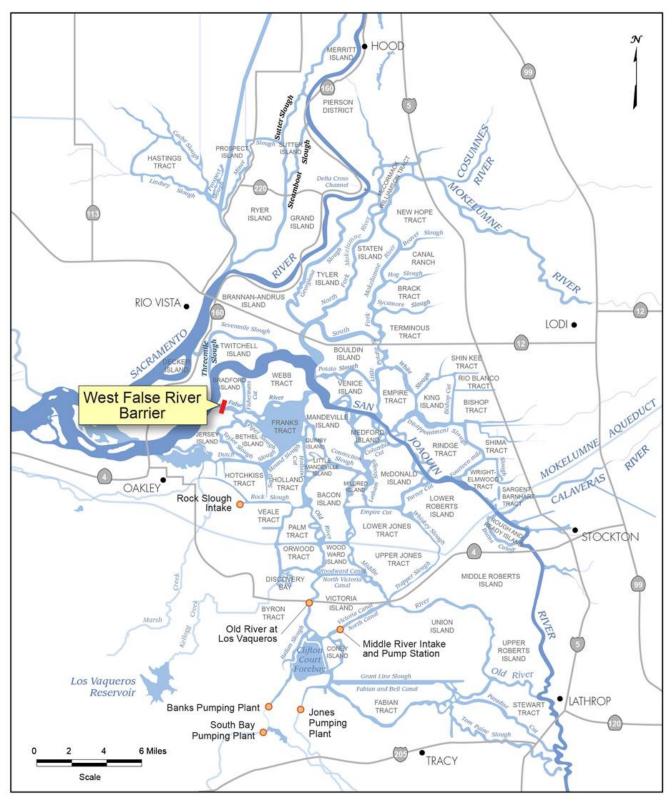
Conservation – the wise, sparing use of water – remains California's most reliable drought management tool. Each individual act of conservation -- such as letting the lawn go brown or replacing a washer in a faucet to stop a leak – makes a difference over time.

Visit SaveOurWater.com to find out how everyone can do their part, and visit drought.ca.gov to learn more about how California is dealing with the effects of the drought.

More drought information is available at DWR's Drought website: http://water.water.ca.gov/waterconditions/waterconditions.cfm

Information about emergency drought barriers is available here: http://www.water.ca.gov/waterconditions/emergencybarriers.cfm.

## Planned Location of Temporary Emergency Drought Barrier in the Delta



## Boating Detours around Emergency Drought Barrier

Travel Time Estimates- South Delta (Discovery Bay to San Joaquin River) Travel Time Estimates- entral Delta (Bethel Island to San Joaquin River)

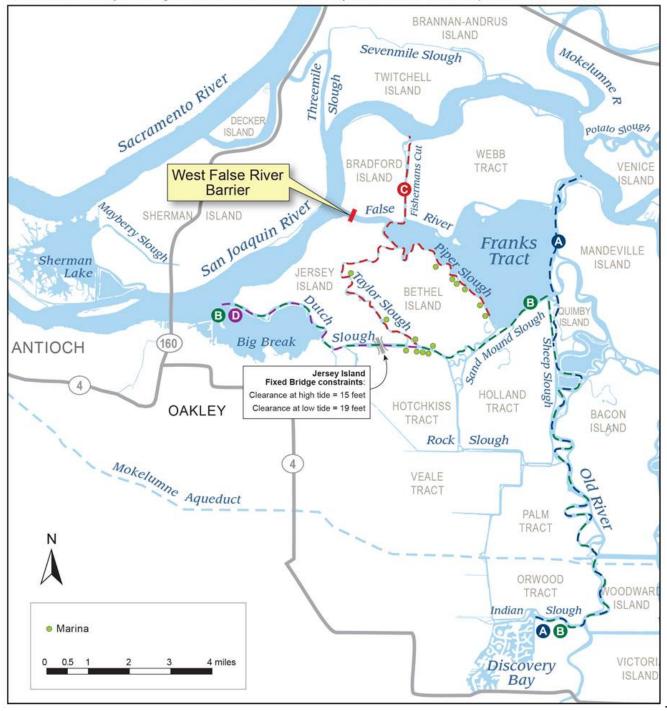
A Route for large-mast vessels: 40 to 45 minutes from Discovery Bay north to Old River keeping right at Frank's Tract going north up to the San Joaquin River (Deep Water Channel)

B Route for smaller vessels: 40-50 minutes from Discovery Bay north to Old River, west to Sand Mound Slough, west on Dutch Slough towards the San Joaquin River past Big Break (see note).

- 30 minutes from Taylor Slough or Piper Slough marinas north towards ര False River and north up Fishermans Cut.
- 30-40 minutes from Bethel Island marinas south to Sand Mound D Slough, west on Dutch Slough towards the San Joaquin River past Big Break (see note).

Note: Maintain course as far north as possible in main channel of Dutch Slough going past Big Break. 5 mile-per-hour limit on both Sand Mound Slough and Dutch Slough.

Detours identified are subject to changes in natural flow conditions which are beyond the control of California Department of Water Resources.





The Department of Water Resources operates and maintains the State Water Project, provides dam safety and flood management and inspection services, assists local water districts in water management and water conservation planning, and plans for future statewide water needs.